

# TITLE

## NANOPARTICLE FRACTIONATION AND SIZE DETERMINATION

### ABSTRACT

A novel method for fractionating stabilized, water-soluble  
 5 nanoparticles based upon the size of the nanoparticles was discovered.  
 For stabilized, charged, water-soluble nanoparticles, the method  
 comprises the addition of a substantially water-miscible organic solvent to  
 an aqueous nanoparticle solution in the presence of an electrolyte.  
 Moreover, a method for determining the average particle size of stabilized,  
 10 charged, water-soluble nanoparticles using gel electrophoresis was  
 discovered.

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